

Title (en)

Method of providing an encapsulation layer stack, coating device and coating system

Title (de)

Verfahren zur Bereitstellung eines Verkapselungsschichtstapels, Beschichtungsvorrichtung und Beschichtungssystem

Title (fr)

Procédé pour la fourniture d'une pile de couches d'encapsulation, dispositif de revêtement et système de revêtement

Publication

EP 2051311 A1 20090422 (EN)

Application

EP 07118528 A 20071015

Priority

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Abstract (en)

A coating system or encapsulation module 1 is coupled with a substrate handling module 2, wherein substrates 3a to be encapsulated and substrates 3b that already have an encapsulation layer stack deposited thereon are handled in a nitrogen atmosphere. The substrate handling module 2 comprises a magazine 4 for storing substrates 3a to be coated and encapsulated substrates 3b. A handling device 5 unloads the substrates 3a to be coated from the magazine 4 and loads encapsulated substrates 3b into the magazine 4. The encapsulation module 1 has a first ink-jet coating chamber 10a. In said first ink-jet coating chamber 10a a photoresist layer is deposited on the substrate 3a by means of an ink-jet printing method. The ink-jet printing method is carried out in an atmosphere of about 10 mbar. Then the substrate 3a is transported into a first CVD (chemical vapor deposition) coating chamber 11a. In the CVD coating chamber 11a a first silicon nitride layer is deposited on the substrate 3a, i.e. on the photoresist layer, by using a CVD coating method at a pressure of about 10⁻² mbar to 10⁻³ mbar. This process is repeated in second and third ink-jet coating chambers 10b, 10c and second and third CVD coating chambers 11b, 11c, respectively.

IPC 8 full level

H01L 51/52 (2006.01)

CPC (source: EP)

H10K 50/844 (2023.02); **B05D 1/62** (2013.01); **B05D 3/0493** (2013.01); **B05D 7/52** (2013.01)

Citation (applicant)

- WO 03098716 A1 20031127 - OTB GROUP BV [NL], et al
- US 2003127973 A1 20030710 - WEAVER MICHAEL STUART [US], et al
- US 2005030612 A1 20050210 - YAMAZAKI SHUNPEI [JP], et al

Citation (search report)

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Designated contracting state (EPC)

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